CLAIMS

What is claimed is:

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- 1. An automated carrier-based pest control system, comprising:
 - a substantially automated sprayer;

a container in fluid communication with the substantially automated sprayer for holding a carrier-based mixture of ingredients for discharge from the substantially automated sprayer,

wherein the carrier-based mixture of ingredients includes at least one chemical; one or more discharge control units operably connectable to the substantially automated sprayer and to the container for regulating discharge of the carrier-based mixture of ingredients, wherein the one or more discharge control units includes means for discharging the carrier-based mixture of ingredients on an animal at any time and at any time interval.

- 2. An automated carrier-based pest control system as recited in claim 1, wherein the carrier is selected from the group of carriers consisting of an oil, silicon, polymers, gels, and thickening agents.
- 3. An automated carrier-based pest control system as recited in claim 2, wherein the carrier-based mixture of ingredients is composed of not less than 3.00% oil by volume.
- 4. An automated carrier-based pest control system as recited in claim 3, wherein oil is mineral oil.
- 5. An automated carrier-based pest control system as recited in claim 4, wherein the at least one chemical includes a pesticide.
 - 6. An automated carrier-based pest control system as recited in claim 5, wherein the at least one chemical is selected from the group of chemicals consisting of pyrethroids, organopolysiloxanes, organophosphates, and systemic endoparisitides.

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- 7. An automated carrier-based pest control system as recited in claim 6, further comprising one or more members demountably coupled to the system for positioning the substantially automated sprayer in relation to the animal.
- 8. An automated carrier-based pest control system as recited in claim 7, wherein the one or more discharge control units includes a sensor-counter combination.

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- 9. An automated carrier-based pest control system as recited in claim 8, wherein the sensor-counter combination is programmable for random or selectably-random discharge of the mixture of carrier-based ingredients.
- 10. An automated carrier-based pest control system as recited in claim 9, wherein the substantially automated sprayer includes at least one banding nozzle for discharging the carrier-based mixture of ingredients in a substantially focused stream.
- 11. An automated carrier-based pest control system as recited in claim 10, wherein the one or more discharge control units includes a solenoid valve 1/4" diameter or larger.
- 12. An automated carrier-based pest control system as recited in claim 11, wherein the one or more discharge control units includes an accumulator.
 - 13. An apparatus for discharging one or more carrier-based ingredients on a cow, comprising: a sprayer formed with at least one nozzle,
 - wherein the at least one nozzle includes means for applying on the cow one or more carrier-based ingredients in a variety of configurations;
 - a container connectable to the sprayer for holding the one or more carrier-based ingredients;

means operationally couplable to the sprayer and the container for regulating discharge of the one or more carrier-based ingredients; and means positionable on the discharge regulating means for detecting but not restraining the cow during discharge of the one or more carrier-based ingredients.

- 14. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the applying means includes an adjustable nozzle.
 - 15. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the applying means includes a plurality of adjustable nozzles mountable on one or more dividing bars.
 - 16. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the discharge regulating means includes a timer.
- 17. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the discharge regulating means includes a programmable controller for selectively and randomly applying on the cow one or more carrier-based ingredients.
 - 18. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the detecting means includes a unitary sensor-timer.
 - 19. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 13, wherein the detecting means includes a unitary sensor-timer mounted on one or more dividing bars.
- 25 20. An apparatus for discharging one or more carrier-based ingredients on a cow as recited in claim 14, wherein the apparatus is energized by direct current.

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21. A pest control apparatus, comprising:

a sprayer;

means in fluid communication with the sprayer for holding a carrier-based mixture of ingredients for application on an animal; and

means for discharging the carrier-based mixture of ingredients on the animal.

- 22. A pest control apparatus as recited in claim 21, wherein the holding means includes at least one container.
- 10 23. A pest control apparatus as recited in claim 21, wherein discharging means includes at least one discharge control unit operably connectable to the sprayer.
 - 24. A pest control apparatus as recited in claim 21, wherein the discharging means includes means for discharging varying amounts of the carrier-based mixture of ingredients at one or more specific locations on the anatomy of the animal.
 - 25. A pest control apparatus as recited in claim 21, further comprising one or more sensors operatively connectable to the discharging means for regulating discharge of the carrier-based mixture of ingredients in relationship to the speed of the animal.
 - 26. An pest control apparatus as recited in claim 21, further comprising one or more members demountably connectable to the apparatus for positioning the sprayer in relationship to the animal.

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